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APPLICATION NO	). I	FILING DATE	FIRST NAMED INVENTOR	. ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/883,733		06/18/2001	Alexander E. Andreev	01-308 1496.00129	2457
24319	7590	08/11/2005		EXAM	INER
LSI LOG	IC CORPO	ORATION	LEMMA, SAMSON B		
1621 BARBER LANE MS: D-106				ART UNIT	PAPER NUMBER
MILPITAS, CA 95035				2132	
				DATE MAILED: 08/11/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

6							
	Application No.	Applicant(s)					
Office Action Summany	09/883,733	ANDREEV ET AL.					
Office Action Summary	Examiner	Art Unit					
The MAN INC DATE of this communication on	Samson B. Lemma	2132					
The MAILING DATE of this communication ap Period for Reply	•	·					
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a rep If NO period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply oly within the statutory minimum of thirty (3 will apply and will expire SIX (6) MONTH e, cause the application to become ABAN	y be timely filed  30) days will be considered timely.  S from the mailing date of this communication.  IDONED (35 U.S.C. § 133).					
Status							
2a) ☐ This action is <b>FINAL</b> . 2b) ☐ Thi 3) ☐ Since this application is in condition for allows	, <del></del>						
Disposition of Claims							
4) ⊠ Claim(s) 1-20 is/are pending in the application 4a) Of the above claim(s) is/are withdra 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) 1.11 & 20 is/are rejected. 7) ⊠ Claim(s) 2-10 and 12-19 is/are objected to. 8) □ Claim(s) are subject to restriction and/	awn from consideration.						
Application Papers							
9) The specification is objected to by the Examin 10) The drawing(s) filed on is/are: a) ac Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the E	cepted or b) objected to by e drawing(s) be held in abeyance ction is required if the drawing(s)	e. See 37 CFR 1.85(a). is objected to. See 37 CFR 1.121(d).					
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreig a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Bureat* * See the attached detailed Office action for a list	nts have been received. Its have been received in Apporting documents have been reau (PCT Rule 17.2(a)).	olication No eceived in this National Stage					
Attachment(s)							
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date	Paper No(s)/N	nmary (PTO-413) Mail Date rmal Patent Application (PTO-152)					

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#### DETAILED ACTION

1. This office action is in replay to an amendment filed on May 25, 2005.

<u>Claims 1-20</u> have been amended and claims 1-20 are pending.

## Response to Arguments

2. Applicant's arguments with respect to **claims 1-20** have been considered but are most in view of the new ground(s) of rejection.

### Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. <u>Claims 1,11 and 20</u> are rejected under 35 U.S.C. 102 (b) as being unpatentable over **Terry F. Ritter** (hereinafter refereed to as **Ritter**) (U.S. Patent No. 5,623,549) in view of **Luyster** (hereinafter referred to as **Luyster**) (U.S. Patent No. 6,182,216 B1)

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- 5. As per claim 1, 11 and 20 Ritter discloses a method of defining a transformation between an input signal and an output signal, the method comprising the steps of:
  - (B) Allocating said input signal [Column 16, lines 64-65; Figure 10, ref. Num "106"](64 bit-input message block X is allocated) among a plurality of block input signals[Column 16, lines 65-66; Figure 10, ref. Num "183a"](the input message is allocated into eight message sub-blocks x1, x2,.....,x8 where each x<sub>i</sub> is an 8 bit sub-block of X);
  - (C) Generating a plurality of a block output signals responsive to said one of said block input signals and (ii) said symbol in one of said tables;

    [Column 16, lines 66-column 17, lines 6; figure 10,ref. Num "182" shown above ref. Num "180"; ref. Num "180"; ref. Num "182" shown below ref Num "180"](Each of the blocks  $\mathbf{x}_i$  is transformed first via corresponding substitution mechanism or transfer function as shown on figure 10, ref. Num "182" which is shown above ref. Num "180" to produce an 8 bit values  $\mathbf{x}'_i$ . Then the 8-bit data values  $\mathbf{x}'_i$  as a 64 bit data block goes to another transfer function which is the DES mechanism shown on figure 10, ref. Num "180" and using the key K produces a 64-bit output data block  $\mathbf{Y}$  made up of 8-bit sub-blocks  $\mathbf{y}1$ ,  $\mathbf{y}2$ ,  $\mathbf{y}3....\mathbf{y}8$ . Finally each of the 8-bit sub-blocks  $\mathbf{y}_i$  is transformed again by a substitution/transfer function block as shown on figure 10, ref. Num "182" below ref. Num "180" and produces 8-bit data block output  $\mathbf{y}'_1$ )
  - (D) concatenating said block output signals to form said output signal of said circuit. [Column 17, lines 6-8]

Ritter does not explicitly disclose

 copying a plurality of symbols from a source file to a plurality of tables of said circuit

However, In the same field of endeavor, Luyster discloses

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• Copying a plurality of symbols from a source file to a plurality of tables (s-box) of said circuit [Column 15, lines 54-59 and column 4, lines 44-59] (block cipher to encrypt a large file and which nevertheless ensures that the subkeys generated by the method reflect every bit of the key in a complex uncorrelated manner before the encryption this files are loaded on the s-box or look up tables as explained on column 4, lines 50-59 and column 15, lines 54-59 meets the recitation of this limitation).

It would have been obvious to one having ordinary skill in the art, at the time the invention was made, to combine the features of copying a plurality of symbols from a source file to a plurality of tables (s-box) as per teachings of **Luyster** into the method as taught by **Ritter** in order to provide a secure mechanism for transferring files for encryption them from the source files to the S-box (tables).

# Allowable Subject Matter

Claims 2-10 and 12-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samson B Lemma whose telephone number is 571-272-3806. The examiner can normally be reached on Monday-Friday (8:00 am---4: 30 pm). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, BARRON JR GILBERTO can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SAMSON LEMMA

**S.L.** 08/04/2005

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